

Serial No.: 10/583,062

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) Cartridge device for analysing blood comprising:
 - (a) a cell having a blood receiving portion for receiving a blood sample and a plug or jack receiving portion being adjacent to the blood receiving portion for receiving a plug or a jack;
 - (b) means for circulating said blood sample within said blood receiving portion; and
 - (c) an electrode holder having at least one incorporated electrode pair; wherein the electrode holder is attachable to the cell such that one end of the at least one electrode pair is positioned inside the blood receiving portion of the cell and forms a sensor unit for measuring the electrical impedance between the two electrodes of the at least one electrode pair within [[the]]said blood sample and that the opposite end of the at least one electrode pair is positioned inside the plug or jack receiving portion of the cell and forms a plug or jack portion of the at least one electrode pair being connectable directly to the plug or the jack for an electrical connection of the sensor unit to an analyser.
2. (Currently Amended) Cartridge device according to claim 1, wherein the cell is made as a one-piece cell by injection moulding and is made of a blood

Serial No.: 10/583,062

compatible material, ~~such as~~ selected from the group consisting of polystyrene, polymethyl methacrylate, and polyethylene [[etc]].

3. (Previously Presented) Cartridge device according to claim 1 wherein the receiving portion has a cylindrical shape with one open face side.
4. (Currently Amended) Cartridge device according to claim 1, wherein the receiving portion has one open face side, and an at least partly conical formed funnel tube is connected to the open face side of the receiving portion for filling in the blood sample.
5. (Previously Presented) Cartridge device according to claim 4, wherein two guiding rails are positioned on the inner surface of the funnel tube for guiding the electrode holder into position.
6. (Previously Presented) Cartridge device according to claim 4 wherein a stopping wall is positioned between the funnel tube and the jack portion for positioning the electrode holder into a stable position.
7. (Canceled)

Serial No.: 10/583,062

8. (Previously Presented) Cartridge device according to claim 1, wherein the electrode holder is made of a blood compatible material such as polystyrene, polymethyl methacrylate, polyethylene, etc., comprises a plastic body which is made by injection moulding, and has a thickness of about 1 to 5 mm.
- 9-10. (Canceled)
11. (Previously Presented) Cartridge device according to claim 1, wherein the electrode holder comprises a L-formed body with a long part and a short part perpendicular to the long part
12. (Previously Presented) Cartridge device according to claim 1, wherein two electrode pairs are symmetrically incorporated in the electrode holder for two independent separate measurement results.
13. (Previously Presented) Cartridge device according to claim 1, wherein three electrode pairs are linear incorporated in the electrode holder for three separate measurement results, wherein one electrode pair is preferably positioned in the middle of the remaining electrode pairs for comparing platelet adhesion and aggregation under varying flow conditions.

Serial No.: 10/583,062

14. (Currently Amended) Cartridge device according to claim 1, wherein four electrode pairs are linearly incorporated in the electrode holder for four separate measurement results for making a double-determination of [[the]] platelet aggregation under low and high blood flow conditions.
15. (Previously Presented) Cartridge device according to claim 1, wherein at least three electrode pairs are arranged symmetrically to each other at the same radial position in the receiving portion.
16. (Previously Presented) Cartridge device according to claim 1, wherein the two electrodes of one electrode pair are positioned parallel to each other and spaced apart from each other.
17. (Previously Presented) Cartridge device according to claim 1, wherein two electrode pairs are positioned parallel to each other and spaced apart from each other.
18. (Previously Presented) Cartridge device according to claim 1, wherein the electrodes are formed as wires made of a first material comprising a high conductivity, which is covered by a second material comprising a high electrical conductivity and being resistant against oxidation.

Serial No.: 10/583,062

19. (Currently Amended) Cartridge device according to claim 18, wherein the first material is selected from the group consisting of copper, copper alloy, ~~such as~~ copper-silver alloy, copper-magnesium alloy ~~or such like, preferably, and~~ a silver-copper alloy comprising ~~[[0,2]]~~0.2 to 2 % silver, ~~most preferably 0,9 %~~ silver.
20. (Currently Amended) Cartridge device according to claim 18, wherein the second material is a precious metal ~~such as~~ selected from the group consisting of silver, platinum, gold, and a silver coating in the range of about ~~[[0,5]]~~0.5 to 20 g/kg, ~~most preferably 2 g/kg, or such like.~~
21. (Canceled)
22. (Currently Amended) Cartridge device according to claim 1, wherein the at least one electrode pair comprises electrode wires ~~[[have]]~~having a diameter of about 0,1 to 0,5 mm, ~~preferably 0,3 mm~~ 0.1 to 0.5 mm.
23. (Currently Amended) Cartridge device according to claim 1, wherein the means for circulating includes ~~[[are]]~~ a stir bar, which is made of steel, siliconized steel, Teflon polytetrafluoroethylene or ~~Teflon~~ polytetrafluoroethylene-coated, preferably or siliconized stainless steel, wherein the stir bar is ~~for example~~ actuated by permanent magnets.

Serial No.: 10/583,062

24. (Previously Presented) Cartridge device according to claim 1, wherein the plug is a standard RJ12 plug.
25. (Withdrawn) Cartridge device for analysing blood comprising:
- (a) a cell having a receiving portion for receiving a blood sample;
 - (b) a stirring device for circulating said blood sample within said receiving portion; and
 - (c) at least two electrodes for measuring the electrical impedance between the at least two electrodes within the blood sample; wherein the at least two electrodes consist of a metal comprising a first material with a high electrical conductivity, which is covered by a second material, which has a high electrical conductivity and which is resistant against oxidation.
26. (Withdrawn) Cartridge device according to claim 25, wherein the first material is copper, copper alloy, such as copper-silver alloy, copper-magnesium alloy or such like, preferably a silver-copper alloy comprising 0,2 to 2 % silver, most preferably 0,9 % silver, and wherein the second material is a precious metal such as silver, platin, gold or such like.
27. (Canceled)

28. (Withdrawn) Cartridge device according to claim 26, wherein the second precious metal is a silver coating in the range of about 0,5 to 20 g/kg, most preferably 2 g/kg.
29. (Withdrawn) A method for analysing blood by means of a cartridge device comprising at least three electrode wires or electrodes for measuring the electrical impedance between at least two of the at least three electrode wires or electrodes, comprising the following steps:
- (a) measuring the electrical impedance between at least two different pairs of electrode wires or electrodes;
 - (b) comparing the measured electrical impedance values;
 - (c) discarding and repeating the measurements in case the variation is outside a predetermined threshold range; or
 - (d) indicating the measured electrical impedance values and/or the mean or median value thereof in case the variation is within the predetermined threshold range.
30. (Withdrawn) Method according to claim 29, wherein only those measurement values are rejected, which are outside a predetermined threshold range, wherein the remaining measurement values and/or the mean values thereof are indicated.